

**GOVERNMENT OF INDIA
WATER RESOURCES
LOK SABHA**

UNSTARRED QUESTION NO:3796

ANSWERED ON:22.08.2005

PROBLEM OF WATER LOGGING IN IRRIGATION COMMAND AREAS

Nayak Shri Ananta;Singh Shri Chandrabhan Bhaiya

Will the Minister of WATER RESOURCES be pleased to state:

- (a) whether irrigation command areas are facing the problem of water logging because of diminishing water absorption capacity of soil due to rise in water table in these areas;
- (b) if so, the details thereof and the reasons therefor;
- (c) whether the loss differ from crop to crop due to water logging;
- (d) if so, the extent of maximum water logging which the different crops can survive; and
- (e) the period of water logging necessary for different crops?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRI JAI PRAKASH NARAYAN YADAV)

(a)&(b) Yes, Sir. Rise in water table resulting from seepage of water from conveyance system, over irrigation and excess rainfall causes drainage congestion, diminishes the water absorption capacity of soil and hence causes water logging problem in irrigation command areas. As per report of 1991 of Working Group of Ministry of Water Resources, the total water logged area in irrigated commands of the country is 2.46 million hectare. The state-wise detail of water logged areas under irrigated commands is at Annexure-I.

(c) to (e) Yes, Sir. Tolerance of crops to water logging differs from one crop to another, one agro- climatic zone to another, depending on soil type and other physical characteristics. However, as per the Bureau of Indian Standard (BIS) guidelines, vegetable crops are the least tolerant while paddy is the most tolerant crop followed by sugarcane. For common crops, well drained conditions are required for optimum crop productivity. BIS guidelines on crop tolerance to surface stagnation of water is at Annexure-II.

Annexure-I

Annexure referred to in reply of Lok Sabha Unstarred Question No.3796 on "Problem of Water logging in Irrigation Command Areas" by Shri Chandrabhan Singh, MP and Shri Ananta Nayak, MP for answer on 22.08.05.

State-wise Areas Affected by Water logging (Million Hectare)

State Area estimated by the Working Group of
MoWR - 1991 (under irrigated commands)

Andhra Pradesh	0.266
Assam	NR
Bihar	0.620
Gujarat	0.172
Haryana	0.249
Jammu & Kashmir	0.001
Karnataka	0.024
Kerala	0.012
Madhya Pradesh	0.073
Maharashtra	0.015
Orissa	0.196
Punjab	0.200
Rajasthan	0.180
Tamilnadu	0.016
Uttar Pradesh	0.430
West Bengal	NR
Delhi	NR
Total	2.46

NR= Not Reported.

Annexure – II

Annexure referred to in reply of Lok Sabha Unstarred Question No.3796 on "Problem of Water logging in Irrigation Command Areas" by Shri Chandrabhan Singh, MP and Shri Ananta Nayak, MP for answer on 22.08.05.

BIS guidelines on crop tolerance to surface stagnation of water:

Crops	Tolerable flooding (days)
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Vegetables	1
Cotton	3
Maize/Sorghum/Food grains	3
Sugarcane/Banana	7
Paddy	7-10